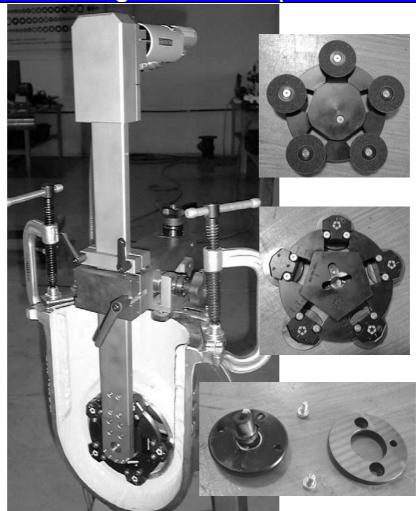
## **Climax**

# Gate Valve Grinding & Lapping Machines Model Numbers VM1150, VM1200

Valve Seat Diameter Range: 1.25"-8.0" (32mm-200mm)







## "On Site" grinding and lapping of gate valves

Easy to set up and handle

Powerful

Rigid design

High performance

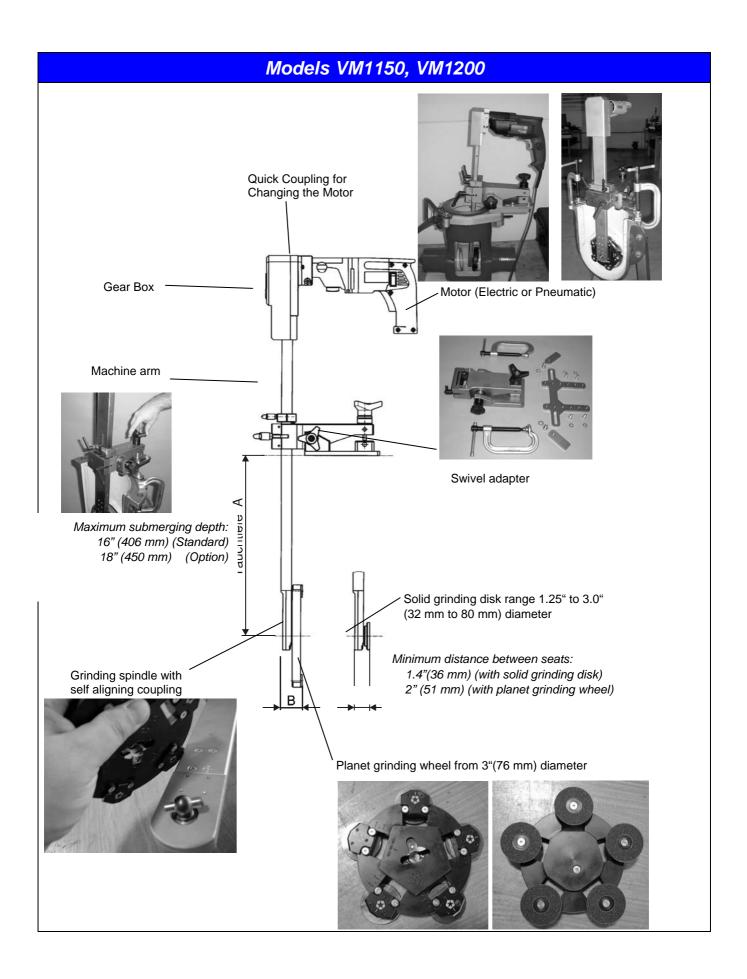


#### **Climax Portable Machine Tools**

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Technical Data				
Working range DN	min 1.25" 32		32 mm	
	max	8"	200 mm	
Submerging depth	max	16"	400 mm	
	optional	18"	450 mm	
Power	electric	0.75 H	0.75 HP(0.55 kW)	
	pneumatic	0.75 H	P(0.55 kW)	
Variable Spindle Speed	electric	electric 100 550 Rev/min		
	pneumatic	100 6	550 Rev/min	
Spindle Torque	permanent	5.3 ft-II	5.3 ft-lbs (7.2 Nm)	
	max	29.5 ft-II	bs (40.0 Nm)	

Weight				
Machine VM1150				
Basic machine without tooling	11 lbs	5 kg		
Machine case	84 lbs	38 kg		
Machine VM1200				
Basic machine without tooling	11 lbs	5 kg		
Machine case	86 lbs	39 kg		

## Model VM1150 (Range: 1.25"-6.0" (32 mm-150 mm) Diameter

P/N

Description



#### **Gate Valve Grinder VM1150S**

Nominal working diameter 1.25" to 6" (32 mm to 150 mm) Submerging depth 16" (400 mm).

Included Components::

- 7 piece solid grinding disk set 2.0"(50 mm), 2.2"(55 mm), 2.4"(60 mm), 2.6"(65 mm), 2.9" (73 mm), 3.2"(80 mm) and 3.4"(85 mm) diameters.
- 1 set (5) of planet arms 1.2"(30 mm) in length.
- Set of 2 planet wheels 3.9"(100 mm), 5.3" (135 mm) diameters.
- 1 set (5) of grinding discs 2.0"(50 mm) diameter.
- 1 set of clamping equipment for mounting the machine on valves with and without top flange.
- Start up set of abrasives grain 100 and 500.
- 1 set of tooling.
- Carrying cases with foam inlet for the machine and the accessories.

420-00S-S12 VM1150S with electric motor 230 V / 50 Hz

420-00S-S13 VM1150S with pneumatic motor

420-00S-S15 VM1150S with electric motor 115 V / 60 Hz

Gate Valve Grinding and Lapping machine VM1150
Machine like VM1150S but with additional lapping equipment

- Set of 3 solid lapping disks 2.2"(55 mm), 2.6"(65 mm), 3.2"(80 mm) diameters
- 2 sets of lapping disks 1.2"(30 mm) and 2.0"(50 mm) diameters.
- Lapping paste 10 and 30 μm.

420-00S-S02 VM1150 with electric motor 230 V / 50 Hz

420-00S-S03 VM1150 with pneumatic motor

420-00S-S05 VM1150 with electric motor 115 V / 60 Hz



VM1150S with electric motor



VM1150S with pneumatic motor (standard scope of supply does not include maintenance unit)

## Model VM1200 (Range: 1.25"-8.0" (32 mm-200 mm) Diameter

P/N

Description



#### **Gate Valve Grinder VM1200S**

Nominal working dia 1.25" to 8" (32 mm to 200 mm) Submerging depth 16"(400 mm). Included Components:

- 7 piece solid grinding disk set 2.0"(50 mm), 2.2"(55 mm), 2.4"(60 mm), 2.6"(65 mm), 2.9" (73 mm), 3.2"(80 mm) and 3.4"(85 mm) diameters.
- Set of 2 planet arms 1.2"(30 mm) and 2.6"(65 mm) in length.
- Set of 2 planet wheels 3.9"(100 mm), 5.3" (135 mm) diameters.
- 1 set of grinding discs 2.0"(50 mm) diameter
- 1 set of clamping equipment for mounting the machine on valves with and without top flange.
- Start up set of abrasives grain 100 and 500.
- 1 set of tooling.
- Carrying cases with foam inlet for the machine and the accessories.

420-00S-S32

VM1200S with electric motor 230 V / 50 Hz

420-00S-S33

VM1200S with pneumatic motor

420-00S-S35

VM1200S with electric motor 115 V / 60 Hz

#### **Gate Valve Grinding and Lapping machine VM1200**

Machine like VM1200S but with *additional lapping equipment*.

- Set of 3 solid lapping disks 2.2"(55 mm), 2.6"(65 mm), 3.2"(80 mm) diameters
- 2 sets of lapping disks 1.2"(30 mm) and 2.0"(50 mm) diameters.
- Lapping paste 10 and 30 μm.

420-00S-S22 VM1200 with electric motor 230 V / 50 Hz

420-00S-S23 VM1200 with pneumatic motor

420-00S-S25 VM1200 with electric motor 115 V / 60 Hz



VM1200S with electric motor



VM1200S with pneumatic motor (standard kit does not include pneumatic maintenance unit)

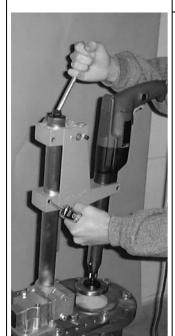
		Accessories	
	P/N	Description	
	240-13K-001	Maintenance unit for pneumatic motor  Required for machines with pneumatic motor.  The maintenance unit is not included in the standard scope of supply with pneumatic driven machines.  Includes:  filter  oiler  pressure gauge  speed controller	
	420-00S-L03	Swing Check accessories For grinding of swing check valves. Includes:  Swivel adapter for adaption of the machine on the valve Spindle extension for reaching the seat with the planet wheels.	
	420-56S-N01	Fixture for gate wedges For grinding of gate wedges "on site" with the VM machines.	
	-M01	Extension of submerging depth  Extension of submerging depth without changing the max. grinding diameter  (Must be ordered with the machine. Can not be ordered after delivery of the machine.  e.g 420-00S-S05-M01)  Extension of submerging depth from 16" to 18"  (400 mm to 450 mm)  • Extension of the machine arm.  • Adaption of the machine case.	
00000	110-33S-N01 110-41S-N01	CBN grinding disk 2"(50 mm) diameter (each) (A total of five required) Required for rough grinding of heavily damaged seats (not included in the component package).  Lapping disk 1.2"(30 mm) diameter (each)	
0 0 0 0	110-42S-N01	(A total of five required)  Lapping disk 2"(50 mm) diameter (each)	
00000		(A total of five required)	

		Accessories
	D/N	
	P/N	Description  Grinding adaptor
		Grinding adapter  For using the tooling of the VM1150(S) on stationary drill presses. The grinding pressure is made by an application of springs.  The scale for the grinding pressure is divided into two ranges: One for high rate of removal of material and the
		other for high precision surfaces.
a h	185-00S-S22	Grinding adapter MT2
		For using on stationary drill presses with morse taper #2.
	185-00S-S23	Grinding adapter MT3
		For using on stationary drill presses with morse taper #3.
		Dignet Arms 2 degrees
		Planet Arms 3 degrees The spindles of these arms are designed with a 3 degree offset. These arms are made to rework the 3 degree relief angle in gate valves
1/4	110-51S-N01	Planet arm #II 3 degrees (2.4"(60 mm) length) (each) (A total of five required) Outside grinding diameter 6.3"-13.0"(160-330 mm) (diameter depends on selected planet wheel)
	110-52S-N01	Planet arm #III 3 degrees (4.5"(115 mm) length) (each) (A total of five required) Outside grinding diameter 13.0"-21.7"(330-550 mm) (diameter depends on selected planet wheel)
	110-50S-L01	3 degree Planet Arm Set
		Includes:
		Planet arm #II 3 degree (5 pieces)
		Planet arm #III 3 degree (5 pieces)
		Planet Arms 5 degree The spindles of these arms are designed with a 5 degree offset. These arms are made to rework the 5 degree relief angle in gate valves
1/4	110-61S-N01	Planet arm #II 5 degrees (2.4"(60 mm) length) (each) (A total of five required) Outside grinding diameter 6.3"-13.0"(160-330 mm)
	110-62S-N01	(diameter depends on selected planet wheel)
	110-025-NUT	Planet arm #III 5 degrees (4.5"(115 mm) length) (each) (A total of five required)
		Outside grinding diameter 13.0"-21.7"(330-550 mm) (diameter depends on selected planet wheel)
	110-60S-L01	5 degree Planet Arm Set
		Includes:
		Planet arm #II 5 degree (5 pieces)  Planet arm #III 5 degree (5 pieces)
		Planet arm #III 5 degree (5 pieces)

## **Accessories**

P/N

Description



#### **Globe Valve Extension Kit**

The extension kit comes with a complete machine arm including the drive motor and a mounting column. It uses the tooling of the VM1150/1200.

**Included Components:** 

- One pieces of ball joint coupling size 10 and 15 each.
- Integrated grinding pressure detection with a scale.
- Mounting column with mounting plate for valves with and without flange.
- Carrying cases with foam inlet for the machine and the accessories.

220-00S-L12

VM1150S with electric motor 230 V / 50 Hz

220-00S-L13 VM1150S with pneumatic motor

220-00S-L15 VM1150S with electric motor 115 V / 60 Hz



Globe valve extension kit with electric motor



Globe valve extension kit with pneumatic motor (standard kit does not include maintenance unit)

## TWIN Machines for Gate and Globe Valves (Range: 1.25"-8.0" (32 mm-200 mm) Diameter P/N Description **Gate Valve Grinder VM1150ST** Includes The VM1150S and the Globe valve conversion 420-00S-T12 VM1150ST with electric motor 230 V / 50 Hz 420-00S-T13 VM1150ST with pneumatic motor 420-00S-T15 VM1150ST with electric motor 115 V / 60 Hz **Gate Valve Grinding and Lapping machine VM1150T** Includes The VM1150 and the Globe valve conversion 420-00S-T02 VM1150T with electric motor 230 V / 50 Hz 420-00S-T03 VM1150T with pneumatic motor 420-00S-T05 VM1150T with electric motor 115 V / 60 Hz **Gate Valve Grinder VM1200ST** Includes The VM1200S and the Globe valve 420-00S-T32 VM1200ST with electric motor 230 V / 50 Hz 420-00S-T33 VM1200ST with pneumatic motor 420-00S-T35 VM1200ST with electric motor 115 V / 60 Hz Gate Valve Grinding an Lapping machine VM1200T Includes The VM1200 and the Globe valve conversion 420-00S-T22 VM1200T with electric motor 230 V / 50 Hz 420-00S-T23 VM1200T with pneumatic motor 420-00S-T25 VM1200T with electric motor 115 V / 60 Hz

Because CLIMAX is committed to product improvement, the machine you receive may be slightly different to the pictures above.